

REMARKS

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the preceding amendments and the following remarks.

Claims 1, 3-5, 7-14, and 16-23 are pending in the application. Several claims have been amended, where appropriate, to better define the claimed invention. The amended claims find solid support in the original drawings. No new matter has been introduced through the foregoing amendments.

Rejections based on Hiroshi Hasegawa

The new 35 U.S.C. 102(b) rejections of claims 1, 3-5, 7-14 and 16-23 as being anticipated by *Hiroshi Hasegawa* are noted. It appears to be the Examiner's interpretation of *Hiroshi Hasegawa* that the point where all resistors R are commonly connected is readable on the claimed neutral point of the AC load. If so, Applicants respectfully traverse the rejections for the following reasons.

Independent claim 1

Hiroshi Hasegawa discloses a motor IM which appears to be regarded by the Examiner as the claimed AC load. A person of ordinary skill in the art would understand that the neutral point of such AC load, i.e., motor IM, is the point from which I_G flows and which is not connected in series by any capacitor and/or resistor to "a reference potential point having little potential variation at a power source system side of the power converter" as presently claimed. The line that connects the neutral point of motor IM and the ground at the AC power source in FIG. 1 of *Hiroshi Hasegawa* does not include any capacitor or resistor, contrary to the claimed invention.

Applicants note that *Hiroshi Hasegawa* discloses a resistor R_C and a capacitor C_C connected in series. Such RC circuit is, however, not connected "between a neutral point of the alternating

current load and a reference potential point having little potential variation at a power source system side of the power converter.” The point where all resistors R in FIG. 1 of *Hiroshi Hasegawa* are commonly connected is not readable on the claimed neutral point of the alternating current load, because a person of ordinary skill in the art would recognize that such common connection point of the resistors R is at best readable only on a neutral point of the power source of motor IM, rather than a neutral point of motor IM itself.

Further, the star-connected RC circuit of *Hiroshi Hasegawa* is only a filter, and not a type of any AC load.

Accordingly, Applicants respectfully submit that there is no *reasonable* interpretation of *Hiroshi Hasegawa* that would teach or disclose each and every element of the rejected claim. Thus, claim 1, as well as the respective dependent claims, is not anticipated by *Hiroshi Hasegawa*.

Independent claim 5

Independent claim 5 includes similar features to claim 1, and is believed patentable over *Hiroshi Hasegawa* for at least the reasons discussed with respect to claim 1 *supra*.

In addition, *Hiroshi Hasegawa* also fails to teach or disclose “a common mode choke connected to the alternating current input of the power converter.” As best seen from FIG. 1 of *Hiroshi Hasegawa*, the common-mode choke L_C is connected to the output, rather than the input, of the power converter.

Applicants respectfully submit that *Hiroshi Hasegawa* fails to anticipate the invention of claim 5, as well as the respective dependent claim(s).

Independent claim 8

The applied reference of *Hiroshi Hasegawa* fails to teach or disclose “a common mode choke connected to said direct current input of the power converter.” As discussed *supra* with

respect to claim 5, the *Hiroshi Hasegawa* common-mode choke L_C is connected to the output, rather than the input, of the power converter.

Applicants respectfully submit that *Hiroshi Hasegawa* fails to anticipate the invention of claim 8, as well as the respective dependent claim(s).

Independent claim 11

The applied reference of *Hiroshi Hasegawa* fails to teach or disclose “a common mode choke connected to and between ... the first power converter and ... the second power converter.” *Hiroshi Hasegawa* appears to disclose two power converters on opposite sides of E_d . However, the reference’s common-mode choke L_C is not connected between the power converters as best seen from FIG. 1 of *Hiroshi Hasegawa*.

Applicants respectfully submit that *Hiroshi Hasegawa* fails to anticipate the invention of claim 11, as well as the respective dependent claim(s).

Independent claim 14

Independent claim 14 includes similar features to claim 1, and is believed patentable over *Hiroshi Hasegawa* for at least the reasons discussed with respect to claim 1 *supra*.

Applicants respectfully submit that *Hiroshi Hasegawa* fails to anticipate the invention of claim 14, as well as the respective dependent claim(s).

Rejections based on *Kensuke* and *Ayano*

The new 35 U.S.C. 103(a) rejections of claims 1, 3-5, 7-14 and 16-23 as being obvious over *Kensuke* and *Ayano* are noted. It appears to be the Examiner’s interpretation of *Kensuke* that the reference discloses the claimed connecting element at the C2-R1 circuit between the neutral point of motor 5 and a constant potential point P or N on the power side. Applicants further note the

Examiner's reliance on *Ayano* for a common mode choke 3, and the Examiner's proposal to combine the *Ayano* common mode choke in the circuit of *Kensuke* to allegedly arrive at the claimed invention.

Applicants respectfully traverse the rejections of all claims because the references are not properly combinable in the manner proposed by the Examiner.

The circuits of *Ayano* and *Kensuke* are both for reducing common mode currents. See *Kensuke* at the Abstract, the last line, and *Ayano* at the Abstract, the last three lines. Thus, a person of ordinary skill in the art would consider the *Kensuke* and *Ayano* circuits as equivalents for performing the same function. Such a person of ordinary skill in the art would have seen no reason for having two circuits for the same purpose in the same power supply system. Thus, the person of ordinary skill in the art would have motivated, at best and if at all, only to replace the *Kensuke* circuit 6a with the *Ayano* common-mode choke 3, rather than to combine the references as the Examiner proposes. The obviousness rejection is therefore improper and should be withdrawn.

The rejections are also traversed for the following additional reasons.

Independent claim 1

Kensuke does not fairly teach or suggest the claimed capacitor. Applicants note the Examiner's reliance on capacitor C2 for the claim feature at issue. Applicants respectfully submit that C2 is not an actual component of motor 5 of *Kensuke*. C2 is merely a stray capacitance that is included in the drawing for the purpose of explaining the operation of the motor 5. The correct understanding of *Kensuke* is that it does not teach or suggest the claimed capacitor and resistor connected in series.

Notwithstanding the above, and solely for the purpose of expediting prosecution, Applicants have further revised claim 1 to distinguish over *Kensuke*. The amended claim now recites, among other things, "wherein no midpoint between the capacitor and the resistor is grounded." In contrast,

the midpoint between C2 and R1 of *Kensuke* is grounded, together with the motor's frame as best seen in all relevant figures of the reference.

The deficiency of *Kensuke* is not deemed curable by the teaching reference of *Ayano*, and therefore, Applicants respectfully submit that claim 1, as well as the respective dependent claims, are patentable over *Kensuke* and *Ayano*.

Independent claim 5

Kensuke does not fairly teach or suggest the claimed capacitor as discussed with respect to claim 1 *supra*.

In addition, *Kensuke* fails to teach or disclose the added claim feature “wherein the connecting element further includes a line that electrically connects the capacitor and the resistor in series, and wherein said line is not grounded” for essentially the same reason detailed with respect to claim 1.

The deficiency of *Kensuke* is not deemed curable by the teaching reference of *Ayano*, and therefore, Applicants respectfully submit that claim 5, as well as the respective dependent claims, are patentable over *Kensuke* and *Ayano*.

Claim 9

Kensuke does not fairly teach or suggest the claimed capacitor as discussed with respect to claim 1 *supra*.

The applied reference of *Kensuke* also fails to teach or disclose the added claim feature “wherein the connecting element further includes a line between the capacitor and the resistor to electrically connect the capacitor and the resistor in series, and wherein said line is entirely ungrounded” for essentially the same reason detailed with respect to claim 1.

The deficiency of *Kensuke* is not deemed curable by the teaching reference of *Ayano*, and therefore, Applicants respectfully submit that claim 9 is patentable over *Kensuke* and *Ayano*.

Claim 12

Kensuke does not fairly teach or suggest the claimed capacitor as discussed with respect to claim 1 *supra*.

The applied reference of *Kensuke* also fails to teach or disclose the added claim feature “wherein an electrical connection between the capacitor and the resistor has no branches so that, in operation, the same current flows through both the capacitor and the resistor” for essentially the same reason detailed with respect to claim 1.

The deficiency of *Kensuke* is not deemed curable by the teaching reference of *Ayano*, and therefore, Applicants respectfully submit that claim 12 is patentable over *Kensuke* and *Ayano*.

Independent claim 14

Kensuke does not fairly teach or suggest the claimed capacitor as discussed with respect to claim 1 *supra*.

In addition, *Kensuke* fails to teach or disclose the added claim feature “wherein the connecting element is not grounded at any point along an electrical connection between the capacitor and the resistor” for essentially the same reason detailed with respect to claim 1.

The deficiency of *Kensuke* is not deemed curable by the teaching reference of *Ayano*, and therefore, Applicants respectfully submit that claim 14, as well as the respective dependent claims, are patentable over *Kensuke* and *Ayano*.


Accordingly, all claims in the present application are now believed in condition for allowance. Early and favorable indication of allowance is courteously solicited.

Applicants note that prosecution of the instant application has been unusually prolonged. The last Office Action is the sixth office action in this case, and therefore, it is respectfully requested that the Examiner carefully study the instant application and telephone the undersigned, Applicant's attorney of record, to discuss any issue(s) that might hinder immediate allowance of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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